

Bridge Inspection										
Bridge File Number	00611 -1 Bridge				Form Type	TH PSR				
Year Built/Year Supstr	1963/1963				Lot No.	2				
Bridge or Town Name	MORLEY				Inspector Name	Garry Roberts				
Located Over	BOW RIVER, 2.13, WATERCRS-ST				Inspector Class	BR CLS A				
Located On	LOCAL ROAD				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	07-Dec-2011				
Legal Land Location	SW SEC 36 TWP 25 RGE 7 W5M				Data Entry By	Erin Roberts				
Longitude, Latitude	-114:51:01, 51:10:23				Data Entry Date	24-Jan-2012				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Tom Carey				
Contract Main. Area	CMA28				Review Date	21-Dec-2011				
Clear Roadway/Skew	7.3 /				Dept. Reviewer Name	Tim Davies				
AADT/Year	400 / 2005 (E)				Dept. Review Date	06-Feb-2012				
Road Classification	RCU-208-110				Follow-Up By					
Detour Length (km)	40									
Allowable Load (t):	Single	CS1 28		Semi	CS2 49		Train	CS3 62		----> On Critical Spans ---->Critical Member
Design Loading:	CS750				----> Primary Span					

Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)		Yes										
Posted:	Lane	NB	On Bridge (m)	5.8	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	5.8	In Advance (Y/N)	Yes
Remarks	Has less clearance @ gutter due to curved portal.											
Required Load Posting (t)		Single				Semi				Truck Train		
Posted Loading (t)		Single				Semi				Truck Train		
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Remarks	Not required.											
Hazard Marker At Bridge (Y/N)		Yes										
Remarks												
Other Sign Types		80 km/hr, curve, 50 km/hr & school zone to South.										

Utilities (Located at)			
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone	Attached to West rail.		Gas
Power	3 lines @ West side.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	No passing, curves and hills both ends of the bridge.
Vertical Alignment		6	6	
Roadway Width (m)	8.500			23 split or broken posts @ SE & SW, some nuts missing from rail to post bolts. Rail damaged but adequate @ NE & NW. 10 broken post and 9 damaged rails at NE. Not thriebeam Missing 14 splice bolts
Approach Bump		7	6	
Guardrail (Y/N)	Yes			
Guardrail		3	3	
Length (m)	26.000			
Current Standard (Y/N)	No			
Termination Type	TURNED DOWN ENDS			
Drainage		6	6	

Approach Road					
			Last	Now	Explanation of Condition
Approach Road General Rating			5	5	
Superstructure					
Bridge Component			Last	Now	Explanation of Condition
(Primary Span : TH, 3 Spans, Lengths(m): 12.5-76.2-12.5, A-Ident Number: A0438-01)					
Special Features					
Special Feature					
(Type :)					
Special Feature					
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	0	0	0	0	
Now	0.0	0.0	0.0	0.0	
Wearing Surface/Deck Top			6	5	Chipcoat epoxy. Worn off 1.5m x 0.5m @ South.
(Material Type : CONVENTIONAL CHIP SEAL COAT)					
(Plank Thickness(mm) :)					
(Plank Width(mm) :)					
Deck Rideability			8	7	
Deck Joints			7	7	Exp. Fixed.
Temperature (deg. C)		-8			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC);ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
63		South pier			
70		North pier			
Curbs/Wheel Guards			8	7	Steel wheelguards.
(Curb Type : Standard)					
(Type : STEEL)					
(Curb Height(mm) : 275)					
(Width(mm) : 340)					
Bridge Rail			4	4	Missing 6 splice bolts and 1 rail to post bolt at SW Rail missing bolts at SW batter post and has pack rust between rail segments Minor chips & corrosion. Base plates corroding
(Type : FLEX BEAM)					
Bridge Rail Posts/Blocking			7	7	
(Type : POST STEEL;POST STEEL)					
Bridge Rail/Posts Coating			6	5	
(Type : PAINT)					
Sidewalk			7	6	

Superstructure								
Bridge Component		Last		Now		Explanation of Condition		
(Primary Span : TH, 3 Spans, Lengths(m): 12.5-76.2-12.5, A-Ident Number: A0438-01)								
Wide Load Damage (Y/N)	No				Three top chord members missing hardware. Two batter posts missing hardware One diagonal with a bolt on angle 10 bolts in total missing (see UT 2010). Minor loss of section from previous corrosion. Four verticals missing hardware. Each portal missing hardware. One bottom chord missing bolt 7/ bay x 10 bays			
High Load Damage (Y/N)	No							
Top Chord			7	7				
Batter Posts			7	7				
Sway Bracings			7	7				
Diagonals			7	7				
Verticals			7	7				
Portals			7	7				
Connections			4	4				
Floor Beams			7	7				
Bottom Chord			7	7				
(No. of Stringers : 70)								
Stringer Detail Ratings								
	N (count)	1 (count)	2 (count)	3 (count)		Missing or damaged hardware T.C. at U1E, U5E and U6E, B.P. at U9W and U9E, Verticals at L2W, L4W, L6W and L8W, portals at U1E, U9E and U9W, Diagonals along U9L8E, Bottom chord L8E		
Last								
Now								
Stringers			6	6				
(Type : STEEL)								
(Width(mm) : 190)								
(Depth(mm) : 460)								
(Spacing(mm) : 970)								
Paint Condition			6	6	Primer showing through along to chord. Some rust inside diagonals at lower connections.			
(Colour Description : GREEN)								
(Colour Code : 14090)								
Touchup Required (Y/N)	No							
Bearings			7	7	A/B slightly bent P1 at L10 (South) P2 at L0 (North)			
Temperature (deg. C)	-8							
(Expansion Type : NEOPRENE STRIP BEARING;ROLLER NEST BEARING)								
(Fixed Type : PINNED BEARING)								
Functioning (Y/N)	Yes							
Sub Deck/Deck Underside			7	5	For the portions viewed			
(Material Type : CONCRETE)								
(Plank Thickness(mm) : 150)								
(Plank Width(mm) :)								
Defects (Percent Area)	0							
Span Alignment Problems								
Vertical (Y/N)	No							
Horizontal (Y/N)	No							
Superstructure General Rating			4	4				
Superstructure								
Bridge Component		Last		Now		Explanation of Condition		
(Secondary Span : RM)								
Special Features								
Special Feature				X				
(Type :)								
Special Feature				X				
(Type :)								

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Secondary Span : RM)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	0	0	0	0	
Now	0.0	0.0	0.0	0.0	
Wearing Surface			6	5	Chipcoat on epoxy. Sections of epoxy 2m2 failed @ North span & South span @ ends.
(Material Type : CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) :)					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			8	7	
Deck Joints			7	7	
Temperature (deg. C)		-8			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC);ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
85		North Abut			
80		South Abut			
Deck Drainage			7	7	
Drains Clogged (Y/N)		No			
Curbs/Median			7	7	
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			5	5	1 anchor nut missing at SW and nut missing on pedestrian rail anchorage at NW 20% corrosion on posts.
(Type : FLEX BEAM)					
Bridge Rail Posts			3	3	
(Type : POST STEEL;POST STEEL)					
Bridge Rail/Posts Coating			4	4	
(Type : PAINT)					
Sidewalk			6	6	Average 50mm concrete placed on SW sidewalk. South end of 'G' girder @ top broken @ North span @ sidewalk.
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Girders			6	6	Main roadway RM girders rate '7'. RM girders which are main girders have hairline longitudinal cracks - minor. Concrete box girder & standard precast girders @ West under sidewalk. Sidewalk box girder @ SW has medium flex cracks. Standard precast girders have long wide cracks in both legs in AZ. SP3 G2 small spall midspan. 7 RM girders, 1 precast, 1 box
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
(Number Of Girders : 18)					
Diaphragms/Cross Frame			X	X	

Superstructure									
Bridge Component		Last	Now	Explanation of Condition					
(Secondary Span : RM)									
Bearings		7	7						
Temperature (deg. C)	-8								
(Expansion Type : NEOPRENE STRIP BEARING;ROLLER NEST BEARING)									
(Fixed Type : PINNED BEARING)									
Coating Adequate (Y/N)	Yes								
Functioning (Y/N)	Yes								
Deck Underside		7	7						
Stains (Percent Area)	2								
Span Alignment Problems									
Vertical (Y/N)	No								
Horizontal (Y/N)	No								
Superstructure General Rating		7	6						
Substructure									
Bridge Component		Last	Now	Explanation of Condition					
Abutments									
(Extended Backwall Piles (Y/N) : N)									
(Extended Backwall Piles Spacing(mm) :)									
(Total Number of Caps/Corbels : :)									
Bearing Seats/Caps/Corbels Detail Ratings									
	N (count)	1 (count)	2 (count)	3 (count)					
Last	0	0	0	0					
Now	0	0	0	0					
Bearing Seats/Caps/Corbels		6	6						
(Type : CONCRETE)									
(Depth(mm) :)									
(Width(mm) :)									
Backwalls/Breastwalls		7	7						
Greatest Height (m)	1.20								
Wingwalls		7	6						
(Total Number of Bearing Piles : 0:0)									
Piles Detail Ratings									
	N (count)	1 (count)	2 (count)				3 (count)		
Last	1	0	0				0		
Now	1	0	0				0		
Piles		N	N						
Paint/Coating		X	X						
Abutment Stability		8	7						
Scour/Erosion		7	7						
Piers/Bents									
(Type : PIER-SOLID)									
(Total Number of Caps/Corbels : :)									
Bearing Seats/Caps/Corbels Detail Ratings									
	N (count)	1 (count)	2 (count)	3 (count)					
Last	0	0	0	0					
Now	0	0	0	0					
Bearing Seats/Caps/Corbels		6	6	Vertical crack in South pier stream side and in North pier abutment side has 2 vertical cracks. Vertical cracks in Sp 1 and 3 supports at ends. Some patching at NE					
(Type : CONCRETE)									

Substructure						
Bridge Component				Last	Now	Explanation of Condition
(Total Number of Bearing Piles : 0:0)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		Massive piers.
Last	0	0	0	0		
Now	0	0	0	0		
Pier Shaft/Piles				7	6	
Greatest Height (m)		8.00				
Bracing/Struts/Sheathing				X	X	
Nose Plate				X	X	
Paint/Coating				X	X	
(Colour Description :)						
(Colour Code :)						
Pier Stability				8	8	
Scour				N	N	Ice.
Debris (Y/N)		No				
Substructure General Rating				6	6	
Structure Usage						
				Last	Now	Explanation of Condition
Channel						
(U/S Direction : W)						
(D/S Direction : E)						
Alignment				8	8	
Bank Stability				6	6	Vertical banks U/S
HWM (m below Top of Curb)				HWM not visible.		
Drift (Y/N)		No				
Slope Protection				4	4	(Broken up at NW, SE corners) Only top portion visible due to ice.
(Type : CONCRETE; CONCRETE)						
Guidebank/Spurs				X	X	
Adequacy of Opening				8	7	
(Fish Compensation Measure 1 : NONE)						
(Fish Compensation Measure 2 : NONE)						
Channel General Rating				4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Add 6 splice bolts, 1 rail to post bolt and 2 anchor nut. Add 2 bolts to sidewalk rail at SW batter post					
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS	2012	See UT- Report, Replace hardware, some holes need to be drilled to accommodate missing bolts. Install 10 missing structural bolts.					
WASHING							
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS							
REPAIR/REPLACE TIMBER CAPS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION	2012	Replace 33 guardrail posts and 9 rail sections. Add 22 splice bolts and nuts as necessary at rail to post bolts					
OTHER ACTION							
OTHER ACTION	2012	Recast damaged portions of concrete slope protection					
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	49.3/49.3	Est. Repl. Yr	2033	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Owen Salava		Previous Assistant's Name				
Next Inspection Date	07-Mar-2015		Previous Inspection Date	21-Jun-2010			
Inspection Cycle (Default) (months)	39						

Comment	
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